REMARKS

The Examiner's comments together with the cited references have been carefully studied. Favorable reconsideration in view of the foregoing amendments and following remarks is respectfully requested.

Claims 13-17 have been amended to describe the added agent as an "acid modifying" agent in accordance with page 7, lines 11-14 of the specification.

New claims 20 and 21 have been inserted based on Page 3, lines 1-7, and Page 4, lines 13-20 to claim alternative embodiments of the invention.

Claims 1-4, 6-8, 10-12, and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Poncelet US 6,468,492 ('492). The rejection is traversed. A key reason why the present invention is believed patentable over the art is the fact that it is conducted at an ambient temperature of 15°C to 35°C. It was to preclude higher temperature heating that the term "directly" was inserted at the end of then step (c) in the prior amendment and is maintained in step b) of this amendment. Before dealing with the art rejection, the enclosed Declaration Under Rule 132 will be discussed.

The enclosed Declaration Under Rule 132 by co-inventor Desrousseaux confirms that the product of the claimed method of the invention is materially altered if the temperature is elevated above ambient. Clearly, the process of the '646 patent calls for an intentional heating and produces a crystalline product. The present invention calls for ambient temperature and results in an amorphous product. Although said to be at a temperature less than 100°C, there is clearly an affirmative heating step in '492. An affirmative heating step clearly excludes ambient temperature (which by definition means no affirmative heating step). The example of the '492 patent is conducted at 96-98°C, which would not be regarded as ambient by anyone. The subject of the '492 patent is described as a better way of making a filamentous tubular crystallized aluminosilicate. The Declaration at page 2 confirms that the reference spectra (as observed by Transmission Electronic Microscopy, on electronic diffraction patterns and by the presence of sharp bands on the Raman spectra) are crystalline, tubular filamentary materials. Although the Examiner suggests that the product of the instant invention is not unexpected, it is established by the Raman spectra that the product of the present invention is amorphous, unlike that of the reference. Accordingly, it is demonstrated that the temperature difference

provides a significantly different resulting structure and is thus unexpected. Thus, the Examiner's assertion that the '492 patent suggests a similar process is overcome. Returning to the art rejection, it is respectfully urged that there are several differences between the Poncelet ('492) reference and the instant invention. The method claims of the instant application only have ambient temperature heating of between 15° and 35°C. In contrast, Poncelet requires heating to 96°C. Attention is drawn to its column 2, line 64, which specifies heat of 96° to 98°C for 24 hours. Further, the claimed invention specifies that the mixture goes directly from ambient temperature to the step of eliminating byproducts formed during steps (a) and (b). Proceeding directly to the step of eliminating byproducts could not include a heating step. Another difference between Poncelet ('492) and the instant invention is that the concentration that is being maintained in step one is not between 1.5×10^{-2} and 0.3 mol/liter. While Example 1 discloses a starting solution of 1.53 mol aluminum chloride this amount is diluted during the preparation. The step with the second addition of aluminum, at column 2 lines 13-18, is the step in which the aluminum is maintained at 0.0147 moles. Therefore, this amount is actually below the 1.5×10^{-2}, limit of the claim. Further, the Poncelet ('492) material is not the same as that formed in the instant invention. The Examiner's attention is directed to the comparison examples of the specification. The comparison Example 1 is identical to Example 1 of Poncelet ('492). In fact this is set forth in the specification by the reference to the European patent application EP 1,119,959 which is the foreign equivalent of the cited Poncelet ('492), and comparison Example 1. It is noted that the Raman spectra of Poncelet ('492) is different than material produced by the method of the instant invention. There is no suggestion or disclosure of Poncelet ('492) to modify the method utilized therein to correspond to those disclosed by the instant invention in order to produce a different aluminosilicate polymer. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

In paragraph 5 of the Final Rejection claims 15-16 stand rejected under 35 USC 103 as being unpatentable over Poncelet ('492) as applied in view of Pinnavaia ('165). The Examiner states that the art teaches the addition of a chelating agent, but fails to teach the order of chelating materials as in the instant claims. The Examiner states that the prior art teaches chelating prior to said byproduct elimination. The Examiner states that use of one or more chelating agents, after byproduct

formation, is taught by Pinnavaia. The Examiner states it would be obvious to one of ordinary skill to rearrange the steps of chelating. This rejection is respectfully traversed. In Poncelet ('492) the addition of acetic acid is associated with the addition of a significant amount of hydrochloric acid. See Example 1 where a 50:50 mixture was used to reduce the pH to 4.0. This is a dispersion step other than a complexing step as the presence of the protons from the HCl would prevent the complexing of Al in the form of protonated aluminol groups, by the carboxylic group of the acetic acid. The measure of acetic acid and HCl is not acting as a chelating agent. In contrast, the chelating agent when used in the present invention is an optional final step, i.e. after eliminating the by-products. The purpose of the chelating agent here is to allow the modification of the surface of the aluminosilicate polymer by forming a chelate compound, the functional group of the chelating agent allowing an increase in affinity of the aluminosilicate polymer with the medium in which it is used (as explained on page 7, lines 11-14). In fact it can be seen that 7 times more acetic acid/g Al is required to chelate than to merely disperse in accordance with Poncelet.

It is also relevant that the addition of the complexing (chelating) agent after the purification step leads to an equilibrated and controlled complexing on the surface of the material. If the chelating agent were added prior to the purification step, there would be an equilibrium between the complexed species and the free species, and the complexing would be disturbed by the subsequent purification resulting in an uncontrolled modification of the material by the complexing agent. Not only is the order of steps critical, therefore, but the chelating agent must be such that it can complex with the surface. There is no such complexing or chelating agent shown in Poncelet ('492). Pinnavaia ('165) does not disclose or suggest modification of the process of Poncelet ('492) to perform the complexing, or chelating treatment, as set forth in the instant claims 13 through 18. Further, as pointed out above, the method of the instant invention produces an entirely different product than that of Poncelet ('492) and it is not suggested to modify this product by the use of the materials of Pinnavaia ('165). Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

In paragraph 6 of the Office Action claims 18 and 19 stand rejected under 35 USC 103 as being unpatentable over Poncelet ('492). The Examiner states that Poncelet ('492) fails to teach the Raman spectrum that is claimed. However, the

Examiner states that it would be obvious to utilize the method of Poncelet to produce the materials motivated by the benefit of increased industrial ability. The Examiner further states that Poncelet ('492) teaches substantially the same method and would therefore result in a material with the same inherent properties. This rejection is respectfully traversed. As urged above, the comparison Example 1 of the instant specification corresponds to the invention Example 1 of Poncelet a ('492). Therefore, it is clear that they are not the same material because the properties of the invention material set forth in the instant specification are different from those of comparison Example 1 of the instant specification. There is no disclosure or suggestion in Poncelet ('492) to modify the process taught therein to form the instantly claimed material or method. Therefore, it is respectfully requested that this rejection be reconsidered and withdrawn.

On Page 8 of the Office Action, claims 1-4, 6-8, and 10-19 are provisionally rejected under nonstatutory obviousness type double patenting over claims 1-8, 10-11, and 17-24 of copending application 10/521,899. On page 8 and 9 of the Office Action claims 18-19 stand provisionally rejected under obviousness type nonstatutory double patenting over claim 1, of copending application 10/522,006. It is respectfully requested that these double patenting rejections be reconsidered and withdrawn in view of the Terminal Disclaimer which is filed with this amendment.

Response to Examiner's comments, concerning the Applicants' arguments in paragraph 1 of the Final Rejection

In response to the Applicants urging that Poncelet ('492) teaches a heating step, the Examiner states that Poncelet ('492) teaches a heating step under 100°C which includes the 15-35°C as required by claim 1. However, Applicants' temperature is ambient, meaning the same as the surroundings with the range of 15-35°C provided as outer limits of that term. It is urged that the Examiner is in error and the Examiner's attention is called to column 2, lines 63-65 and to column 3, lines 64 and 65 of Poncelet ('492) where heating to 96°C is performed in the process of Poncelet ('492). The Examiner further states that the step of heating does not appear to result in a materially different structure. This is disproved by the crystalline nature of the '492 material and the amorphous nature of the present material as further demonstrated by the enclosed Declaration Under Rule 132.

The Examiner discusses the chelating step of claims 13-16 and considers it obvious in view of the art. The "chelating" term has been omitted from the claims in favor of the more general "acid modifying" terminology. However, as earlier argued in detail, the chelating or the modifying step of the instant invention is clearly different from Poncelet ('492). Further, the difference has been more clearly set forth in amended claims. The use of chelating materials in '492 is at a completely different step in the process and chelating does not occur at low pH values.

The Examiner sets forth that the Applicants' argument regarding claims 18-19 that the Raman spectra found in a similar European application show distinctness over the applied reference is not found persuasive. The Examiner alleges that the material claimed is taught by Poncelet ('492) and the method is taught by Poncelet ('492). The Examiner further states that applied reference, Poncelet ('492), does not describe the Raman spectra, and therefore the comparison found in the argument is not relevant. As was argued earlier, comparison Example 1 of the instant application corresponds to Example 1 of Poncelet ('492). Within the instant application the difference in Raman spectra is clearly set forth for the material of both the instant application and the Poncelet ('492) application. Therefore, the comparison of the instant application is relevant and exactly on point. Further, as urged above, the method of the instant application is not the same as the prior art in that no heating takes place.

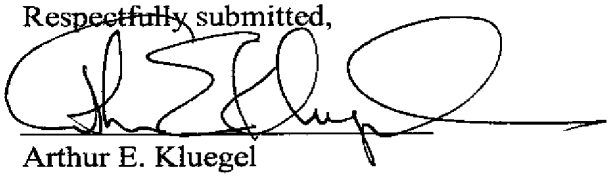
Further in support of the various comments throughout this amendment that the material of Poncelet ('492) is different than the material and method of the instant invention, there is provided herewith the previously mentioned Declaration under Rule 132 of an inventor of the instant application and of the Poncelet ('492) application. In that Declaration Ms. Desrousseaux sets forth that the Roman spectra represented by Figure 1 of the instant application is in fact material made by the method according to Poncelet ('492). Further, the Declaration sets forth that the comparison Example 1 is prepared according to the method described in EP 1, 112, 952 which is the equivalent of Poncelet ('492). Ms. Desrousseaux sets forth that the heating step of Example 1 of Poncelet ('492) produces a crystalline fibrous material that would not be produced if the temperature of formation was significantly lower. The instant invention produces an amorphous isotropic aluminosilicate polymer which

is a different material then that of Poncelet ('492). The Declaration makes clear that the materials of Poncelet ('492) differ from those of the instant invention.

Therefore, it is respectfully requested that the rejections under 35 USC 102 and 103 and under obviousness type double patenting be reconsidered and withdrawn and that an early Notice of Allowance be issued in this application.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

Respectfully submitted,



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Enclosures: Declaration Under Rule 132 and Terminal Disclaimer

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.